United Nations A/56/394

General Assembly

Distr.: General
21 September 2001

Original: English

**Fifty-sixth session**
Agenda item 86
**International cooperation in the peaceful uses of outer space**

# Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III)

## Report of the Secretary-General*

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* The present report was finalized following the conclusion of the consultations among interested member States that were held after the forty-fourth session of the Committee on the Peaceful Uses of Outer Space concerning the interim coordinators for action teams to implement the recommendations of UNISPACE III.

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# I. Introduction

1. The General Assembly, in its resolution 54/68 of 6 December 1999, took note with satisfaction of the report of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III),[1] which was convened in Vienna from 19 to 30 July 1999, and endorsed the resolution entitled "The Space Millennium: Vienna Declaration on Space and Human Development".[2] In that resolution, the Assembly urged Governments, organs, organizations and programmes of the United Nations system, as well as intergovernmental and non-governmental organizations and industries conducting space-related activities, to take the necessary action for the effective implementation of the Vienna Declaration and called upon all concerned to implement the recommendations made by UNISPACE III.

2. In its resolution 55/122 of 8 December 2000, the General Assembly requested the Secretary-General to report to it at its fifty-sixth session on the implementation of the recommendations of UNISPACE III. The present report is submitted in response to that request.

# II. Action taken by the Committee on the Peaceful Uses of Outer Space and its subsidiary bodies

3. In accordance with General Assembly resolution 55/122, the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space considered the implementation of the recommendations of UNISPACE III through the Working Group of the Whole that the Subcommittee reconvened at its thirty-eighth session. The Committee endorsed the recommendations of the Working Group, as contained in its report,[3] and made further progress in the implementation of the recommendations of UNISPACE III.

## A. Establishment of action teams

4. The Working Group of the Whole of the Scientific and Technical Subcommittee agreed that recommendations of UNISPACE III could be assessed and implemented through the voluntary leadership of individual member States and their appropriate governmental institutions on particular actions. The Working Group also agreed that the leaders would conduct discussions within their teams (which would be open to participation by all interested parties) would seek the broadest possible participation of non-governmental entities and would report to the Scientific and Technical Subcommittee.

5. Noting that there were 33 actions recommended in the Vienna Declaration as elements of a strategy to address global challenges in the future, the Working Group of the Whole recommended that a survey be conducted among Member States to identify the level of interest and priority for each action. Through that survey each Member State would indicate whether it wished to be the leader or a member of the team to carry out the recommended action. Each Member State would also identify non-governmental entities that wished to be members of the team.

6. As requested by the Working Group of the Whole, the Office for Outer Space Affairs circulated the survey to Member States and compiled the results for consideration by the Committee at its forty-fourth session, held from 6 to 15 June 2001. As at 1 August 2001, 46 countries had submitted replies and relevant information in connection with the survey.

7. At its forty-fourth session, the Committee noted that Member States had assigned highest priority to the recommendations indicated below. For recommendations 2, 7, 11 and 18, the Committee reached agreement on the countries that should act as interim coordinators, exercising leadership in conducting the work associated with the recommendations concerned and coordinating the activities to be undertaken by participants of the team prior to the thirty-ninth session of the Scientific and Technical Subcommittee, in 2002. For recommendations 1 and 10, the Committee noted that consultations were being held among interested countries to identify interim coordinators. The Office for Outer Space Affairs was requested to inform Member States of the interim coordinators that had been agreed upon as a result of the consultations, which are reflected below. The Committee agreed that the action teams for the following recommendations could start their work:

| *Recommendations assigned highest priority* [a] | | *Interim coordinator(s)* |
|---|---|---|
| 1. | Develop a comprehensive, worldwide environmental monitoring strategy | Iran (Islamic Republic of), Philippines and Syrian Arab Republic |
| 2. | Improve the management of Earth's natural resources | India |
| 7. | Implement an integrated, global system to manage natural disaster mitigation, relief and prevention efforts | China (interim coordinator); Canada (co-coordinator); France (secretariat) |
| 10. | Improve universal access to and compatibility of space-based navigation and positioning systems | Italy and United States |
| 11. | Promote sustainable development by applying the results of space research | African States, under the leadership of Nigeria |
| 18. | Increase awareness among decision makers and the general public of the importance of space activities | United States, with the active assistance of Austria |

[a] Each recommendation is numbered as in the questionnaire circulated to Member States in a note verbale dated 13 March 2001. The questionnaire listed the recommendations in the order of their appearance in the Vienna Declaration.

The Committee agreed that, by the thirty-ninth session of the Scientific and Technical Subcommittee, in 2002, the interim coordinator for each of the recommendations listed above would identify principal participants and reach consensus on who would be proposed to lead the team responsible for the recommendation. In cooperation with Member States that had expressed interest in participating, the interim coordinator would be responsible for preparing a work plan and defining principal products to be delivered by the team.

8. The Committee noted that the offers to be leaders of the activities had been received for the recommendations below and agreed that the countries indicated would act as the interim coordinators for the recommendations concerned. The Committee also agreed that the work of the action teams for those recommendations could start as proposed by the respective countries:

| *Recommendations for which an offer to be leader of the activity had been received* [a] | | *Interim coordinator(s)* |
|---|---|---|
| 4. | Enhance weather and climate forecasting | Portugal |
| 6. | Improve public health services | Canada |
| 7. | Implement an integrated, global system to manage natural disaster mitigation, relief and prevention efforts | China (interim coordinator); Canada (co-coordinator); France (secretariat) |
| 14. | Improve the international coordination of activities related to near-Earth objects | United Kingdom |
| 17. | Enhance capacity-building by developing human and budgetary resources | Japan |
| 32. | Identify new and innovative sources of financing to support the implementation of the recommendations of UNISPACE III | France |

[a] Each recommendation is numbered as in the questionnaire circulated to Member States in a note verbale dated 13 March 2001. The questionnaire listed the recommendations in the order of their appearance in the Vienna Declaration.

The Committee agreed that, by the thirty-ninth session of the Scientific and Technical Subcommittee, in 2002, the interim coordinator for each of the recommendations listed above would moderate those activities necessary to present the objectives, the preliminary results of the assessment and a detailed work plan, including the composition of the team and the products expected, at subsequent meetings of the Subcommittee and the Committee.

9. The Committee agreed to invite all Member States to identify the recommendations for which specific actions were not being undertaken through the procedure described above and to consider offering to lead action teams to implement recommendations on a priority basis. The Committee also agreed that the Scientific and Technical Subcommittee, at its thirty-ninth session, in 2002, should identify any other recommendations for which urgent actions were required and should agree on interim coordinators of the teams to be responsible for those recommendations.

10. As requested by the Committee, the Office for Outer Space Affairs informed the organizations of the United Nations system and intergovernmental and non-governmental organizations with observer status with the Committee of the work accomplished and the progress made in the establishment of action teams. A survey is currently being conducted among those organizations to identify the recommendations for which they wish to be members of the action teams.

11. The Committee requested the interim coordinators to report on the work conducted and to submit work plans to the Scientific and Technical Subcommittee at its thirty-ninth session, in 2002, for its approval. The Committee agreed that the Subcommittee, at that session, should reach consensus on the principal participants of the teams.

## B. Structure of the agenda of the Committee's subcommittees and the strategy to address global challenges referred to in the Vienna Declaration on Space and Human Development

12. The current structure of the agenda of the Committee's Scientific and Technical Subcommittee and Legal Subcommittee enables those bodies to provide policy guidelines to the action teams to implement recommendations of UNISPACE III. The action teams complement the work conducted by those bodies on the agenda items that relate to the global challenges set forth in the Vienna Declaration. The Committee had revised the structure of the agendas of its subcommittees at its forty-second session, in 1999, enabling the subcommittees to introduce new agenda items either under multi-year work plans with clear objectives to be achieved within a fixed time period or as single issues/items for discussion to be considered for one session.[4]

13. Some of the elements contained in the nucleus of the strategy referred to in the Vienna Declaration are being considered by the Committee's Scientific and Technical Subcommittee through multi-year work plans. At its thirty-eighth session, the Subcommittee began to consider the items entitled "Means and mechanisms for strengthening inter-agency cooperation and increasing the use of space applications and services within and among entities of the United Nations system" and "Implementation of an integrated, space-based global natural disaster management system" under the three-year work plans.[5] The Subcommittee also reached agreement on a multi-year work plan, covering the period from 2002 to 2005, to further consider the item entitled "Space debris".[6] By considering those items, the Subcommittee addresses the following elements constituting the Vienna Declaration: (a) using space applications for human security, development and welfare; (b) advancing scientific knowledge of space and protecting the space environment; and (c) strengthening and repositioning of space activities in the United Nations system.

## C. Promotion of the participation of youth in space activities

14. The participation of youth was an important element contributing to the success of UNISPACE III. During the Conference, the Space Generation Forum was organized by and for young professionals and university students. Some of the recommendations of the Forum were included in the Vienna Declaration, such as the creation of a consultative mechanism to facilitate the continued participation of young people from all over the world, especially young people from developing countries and young women, in cooperative space-related activities.

15. At its thirty-seventh session, the Scientific and Technical Subcommittee noted that the Youth Advisory Council, a voluntary body, had been formed to facilitate the implementation of various initiatives proposed by the Space Generation Forum. The Subcommittee agreed that the Council could be granted observer status with the Committee on the Peaceful Uses of Outer Space.

16. The Office for Outer Space Affairs, within the framework of the United Nations Programme on Space Applications, assisted the Youth Advisory Council in organizing its work. The United Nations/Austria/European Space Agency (ESA) Symposium on Enhancing the Participation of Youth in Space Activities, held in Graz, Austria, from 11 to 14 September 2000, provided a forum for members of the Council to discuss the orientation of its activities and its possible contributions to the work of the Committee on the Peaceful Uses of Outer Space. As a result, the Council was re-organized to become the

Space Generation Advisory Council, to provide advice to the United Nations Programme on Space Applications in promoting the participation of young people in space activities.

17. At its forty-fourth session, the Committee on the Peaceful Uses of Outer Space considered a formal application from the Space Generation Advisory Council for observer status with the Committee. The Committee decided to grant permanent observer status to the Space Generation Advisory Council on the understanding that it would apply for consultative status with the Economic and Social Council.

### D. Trust Fund for the United Nations Programme on Space Applications

18. Pursuant to General Assembly resolution 54/68, the terms of reference of the Trust Fund for the United Nations Programme on Space Applications were modified to include the implementation of the recommendations of UNISPACE III. The Secretary-General invited all States to contribute voluntarily to the Trust Fund. On the basis of recommendations of the Committee on the Peaceful Uses of Outer Space at its forty-third session,[7] the Secretary-General identified priority project proposals in his letter of invitation.

19. Following General Assembly resolution 54/68, the Office for Outer Space Affairs submitted to the Committee at its forty-fourth session a list of States that had responded to the invitation by the Secretary-General. The Committee urged all member States to contribute to the Trust Fund, if they had not done so, in particular to support the projects and activities recommended by the Committee at its forty-third session.

## III. Implementation of the plan of action of the Office for Outer Space Affairs

20. Pursuant to General Assembly resolution 54/68, the Office for Outer Space Affairs had prepared a plan of action to implement the recommendations of UNISPACE III and submitted the plan to the Committee on the Peaceful Uses of Outer Space for its review. The Committee had endorsed the plan of action as proposed by the Office and recommended its implementation.[8] In its resolution 55/122, the Assembly requested the Secretary-General to begin implementing those measures and activities which were contained in the plan of action and were within the programme of work of the Office, and to ensure the full implementation of the plan with the necessary resources in 2002.

21. The resources required for the full implementation of the plan of action have been reflected in the proposed programme budget for the biennium 2002-2003 (A/56/6, sect. 6). The Committee, at its forty-third session, stressed the importance of the full implementation of the plan of action by the Office for Outer Space Affairs with the necessary resources in 2002 and expressed its hope that the General Assembly would take that fully into account.

22. Within its programme work for the biennium 2000-2001, the Office for Outer Space Affairs has planned to carry out some measures and activities in the year 2001 that are contained in its plan of action and made progress as described below.

### A. Strengthening the role of the Committee on the Peaceful Uses of Outer Space and its subcommittees in promoting international cooperation in the peaceful use of outer space

23. As one of the activities and measures to strengthen the role of the Committee on the Peaceful Uses of Outer Space and its subcommittees in promoting international cooperation in the peaceful uses of outer space, the Office for Outer Space Affairs organized a symposium on the human dimension in space science and technology applications during the forty-fourth session of the Committee, as reflected in the plan of action. The organization of the symposium was also in direct response to a request by the General Assembly in its resolution 55/122, in which the Assembly also invited the Committee to expand the scope of international cooperation relating to the social, economic, ethical and human dimension in space science and technology applications. At its forty-fourth session, the Committee agreed that a new item entitled "Space and society" should be included in the agenda at its forty-fifth and forty-sixth sessions.

## B. Initiating a capacity-building programme in areas relating to space law

24. Following UNISPACE III, the Office for Outer Space Affairs included in its plan of action a capacity-building programme in areas relating to space law as a new, major area of its activities. This is also in line with a strategy to be pursued under the medium-term plan for the period from 2002 to 2005, to assist developing countries, when requested, in the development of national space legislation and ratification of existing outer space treaties.[9]

25. Within its programme of work, the Office for Outer Space Affairs is currently in the process of restructuring its home page with a consolidated space law section in order to provide increased legal technical assistance and related information for the benefit of Member States, including links to various other space law related web sites. The Office has made available a searchable index that provides information on the status of signatures and ratification of the five international treaties governing outer space activities. The database can be searched by treaty, State or status and is accessible through the home page of the Office (http://registry.oosa.unvienna.org/oosa/treaty_status/index.stm).

26. Should the General Assembly approve the programme of work of the Office as contained in the proposed programme budget for the biennium 2002-2003, the Office would plan to organize one workshop per year on legal aspects of space activities. The Office would also begin the provision of assistance, upon request, to Member States, in particular developing countries, in the development of national space legislation and ratification of existing outer space treaties. The Office would further develop a database on national space laws. In cooperation with relevant international organizations and space law institutes, the Office would begin developing and distributing education materials on space law in particular for the benefit of developing countries.

## C. Strengthening the activities of the United Nations Programme on Space Applications

27. In its resolution 54/68, the General Assembly called for strengthening the activities of the United Nations Programme on Space Applications and listed a number of activities to be included in the Programme. In response to that call, the plan of action included additional activities of the Programme to be carried out based on the recommendations of UNISPACE III.

28. The overall strategy of the United Nations Programme on Space Applications is to concentrate on a few themes of major importance for developing countries and to establish objectives that can be achieved in the short and medium term. The priority themes of the Programme as noted by the Committee on the Peaceful Uses of Outer Space at its forty-fourth session are: (a) disaster management; (b) satellite communications for tele-education and telemedicine applications; (c) monitoring and protection of the environment, including the prevention of infectious diseases; (d) management of natural resources; and (e) education and research areas in basic space sciences. Within each priority theme, the Programme will pursue the following main objectives: (a) capacity-building; and (b) building awareness among decision makers in order to strengthen local support for the operational use of space technologies. Where feasible, the activities of the Programme will support the action teams established by the Committee to implement the recommendations of UNISPACE III.

### 1. Organization of workshops, seminars, symposia and training courses

29. The plan of action of the Office for Outer Space Affairs responds to a call by the General Assembly, in its resolution 54/68, to organize workshops and conferences on advanced space applications and new system developments for programme managers and leaders of space technology development and applications activities within the framework of the United Nations Programme on Space Applications. Some of the activities carried out or planned in 2001 include the following:

(a) United Nations/European Space Agency/Committee on Space Research Workshop on Data Analysis and Image-Processing Techniques, held in Damascus from 25 to 29 March 2001;

(b) Eleventh United Nations/Sweden International Training Course on Remote Sensing Education for Educators, held in Stockholm and Kiruna, Sweden, from 2 May to 9 June 2001;

(c) Tenth United Nations/European Space Agency Workshop on Basic Space Science, held in Reduit, Mauritius, from 25 to 29 June 2001;

(d) First United Nations/United States of America Workshop on the Use of Global Navigation Satellite Systems, held in Kuala Lumpur from 20 to 24 August 2001;

(e) United Nations Expert Meeting on the Regional Centres for Space Science and Technology Education: Status and Future Development, held in Frascati, Italy, from 3 to 7 September 2001;

(f) Second United Nations/Austria/European Space Agency Symposium on Enhancing the Participation of Youth in Space Activities: Implementing the Recommendations of UNISPACE III, held in Graz, Austria, from 17 to 20 September 2001;

(g) United Nations/International Astronautical Federation Workshop on Making Space Applications Operational: Opportunities and Challenges for Sustainable Development, to b held in Albi, France, from 27 to 29 September 2001;

(h) United Nations/International Academy of Astronautics Workshop on Small Satellites at the Service of Developing Countries: the African Perspective, to be held in Toulouse, France, on 2 October 2001, during the fifty-second International Astronautical Congress;

(i) Second United Nations/United States of America Workshop on the Use of Global Navigation Satellite Systems, to be held in Vienna from 26 to 30 November 2001.

30. Discussions are under way with the co-organizers of the following workshops, which were originally planned to be held in 2001, to hold the activities at a later stage:

(a) United Nations/European Space Agency Workshop on Remote Sensing for Environmental Monitoring and Natural Resource Management, to be held in Prague;

(b) United Nations Workshop on the Use of Earth Observation as an Instrument for Solving Development Problems in Sub-Saharan Africa, to be held in southern Africa.

31. The following training courses, workshops and symposia are planned for 2002:

(a) Twelfth United Nations/Sweden International Training Course on Remote Sensing Education for Educators, to be held in Stockholm and Kiruna, Sweden, from May to June 2002;

(b) United Nations Workshop on Satellite-Aided Search and Rescue, to be held in Bangalore, India, from 18 to 22 March 2002;

(c) Third United Nations/United States of America Workshop on the Use of Global Navigation Satellite Systems, to be held in Santiago in April 2002;

(d) Eleventh United Nations/European Space Agency Workshop on Basic Space Science, to be held in Cordoba, Argentina, in September 2002;

(e) Third United Nations/Austria/European Space Agency Symposium on Enhancing the Participation of Youth in Space Activities, to be held in Graz, Austria, in September 2002;

(f) United Nations/International Astronautical Federation Workshop on Achievements in Implementing the Recommendations of UNISPACE III, to be held in Houston, United States, in October 2002;

(g) United Nations/International Academy of Astronautics Workshop on Small Satellites at the Service of Developing Countries, to be held in Houston, United States, during the World Space Congress in October 2002;

(h) United Nations/European Space Agency Workshop on the Use of Space Technology for Disaster Management, to be held in the region of Asia and the Pacific;

(i) Fourth United Nations/United States of America Workshop on the Use of Global Navigation Satellite Systems, to be held in Africa;

(j) United Nations/United States of America Meeting of International Experts on the Use of Global Navigation Satellite Systems, to be held in Vienna.

### 2. Support to the regional centres for space science and technology education

32. The United Nations Programme on Space Applications has continued to provide education and training support to developing countries through the regional centres for space science and technology education and the Network of Space Science and Technology Education and Research Institutions for Central Eastern and South-Eastern Europe. The regional centres and the Network were established pursuant to General Assembly resolutions 45/72 of 11 December 1990 and 50/27 of 6 December 1995. As requested by the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space, the Office for Outer Space Affairs submitted to the Subcommittee a report on the regional centres and the Network,[10] which contains detailed information on the status of their establishment and operation.

33. The African Regional Centre for Space Science and Technology Education—in English Language, which was inaugurated in Nigeria in October 1998, completed its first nine-month course on remote sensing and satellite meteorology in May 2001. It plans to begin the second course on the subject on 1 October 2001. The African Regional Centre for Space Science and Technology—in French Language, inaugurated in Morocco in October 1998, completed its first nine-month course on remote sensing and geographic information systems (GIS) in February 2001 and a nine-month course on space communications in August 2001. It plans to begin two nine-month courses, one on remote sensing and GIS and the other on satellite meteorology, in November 2001.

34. The Centre for Space Science and Technology Education in Asia and the Pacific, inaugurated in India in November 1995, has held the following postgraduate training courses: (a) five nine-month courses in remote sensing and GIS; (b) two nine-month courses in satellite communications; (c) two nine-month courses on satellite meteorology and global climate; and (d) one six-month course and one nine-month course on space science. A total of 285 persons from 39 countries had attended the postgraduate courses. In 2001, the third nine-month course on satellite communications began in August and the sixth nine-month course on remote sensing and GIS is scheduled to begin in October. Pursuant to a recommendation of the General Assembly in its resolution 54/67, Member States concerned in Asia and the Pacific are undertaking consultations, with the assistance of the Office for Outer Space Affairs, with a view to making the Centre grow into a network of nodes.

35. The Regional Centre for Space Science and Technology Education in Latin America and the Caribbean and the Government of Brazil signed a headquarters agreement in September 2000. The secretariat of the Centre is proceeding with the affiliation of the Centre to the United Nations. The Office for Outer Space Affairs announced that the Regional Centre for Space Science and Technology Education in Western Asia would be established in Jordan and the Government of Jordan was requested to prepare a draft agreement in connection with the establishment of the Centre, which would cover such issues as the goals, objectives and future directions of the Centre, for discussion and adoption by all countries in the region. The Steering Committee of the Network of Space Science and Technology Education and Research Institutions for Central Eastern and South-Eastern Europe agreed to establish multilateral scientific cooperation among the core institutions of the Network and members of the Network submitted proposals for projects that the Network could implement.

### 3. Technical advisory services

36. Provision of technical advisory services continues to be a major activity of the United Nations Programme on Space Applications. Following UNISPACE III, the Programme has increased its efforts to undertake follow-up actions, wherever feasible, based on the recommendations of the workshops and seminars that it has organized. The areas in which the Programme currently provides technical advisory services include the following:

(a) Collaborating with the Government of Japan and ESA in follow-up projects of the series of workshops on basic space science, including the following: (i) establishment and operation of astronomical telescope facilities in Colombia, Egypt, Honduras, Jordan, Morocco, Paraguay, Peru, the Philippines, Sri Lanka and Uruguay; (ii) establishment of ground-based networks of small optical and radio telescopes and associated research and education programmes; and (iii) development of a new concept

for a multinational space-based astronomical satellite mission (World Space Observatory);

(b) Providing assistance to the Asia-Pacific Satellite Communication Council to support its growth and operation, as well as its preparations for the Council's 2002 Conference and Exhibition;

(c) Collaborating with space agencies and international organizations that use Earth observation data and assisting in the activities of the Committee on Earth Observation Satellites, in particular through its ad hoc working group on Earth observation education and training in developing countries and ad hoc Disaster Management Support Group;

(d) Collaborating with ESA and the Department of Economic and Social Affairs of the Secretariat in implementing follow-up projects of the series of training courses on applications of data from the European remote sensing satellite (ERS) and other satellites to natural resources, renewable energy and the environment, including the following: (i) a project on the use of Earth observation data for monitoring glaciers and snow cover in Latin America; (ii) a project for coastal management in Asia and the Pacific; and (iii) a project in Africa on the use of satellite data to locate and plan the management of humid areas.

#### 4. Long-term fellowships

37. To promote the development of indigenous capability, five long-term fellowships will be awarded for the in-depth training of individuals from developing countries for the period 2001-2002. ESA has offered one fellowship each in satellite communication systems, space antennas and electro-magnetics, and remote sensing instrumentation tenable at its European Space Technology Centre in Noordwijk, the Netherlands, and two fellowships for research in remote sensing technology tenable at the European Space Research Institute in Frascati, Italy.

38. Following UNISPACE III, the long-term fellowship programme is being reoriented to strengthen its effectiveness and to enhance the results of other training activities of the United Nations Programme on Space Applications. For the period 2000-2001, the three fellowships offered by ESA allowed university educators who had participated in the series of United Nations/Sweden international training courses to improve their skills and to demonstrate, through appropriate projects in their university environment, the practical usefulness of remote sensing. A similar approach will be taken in selecting candidates for the two fellowships tenable at the European Space Research Institute for the period 2002-2003.

### D. Establishing and strengthening the partnership with intergovernmental and non-governmental organizations and industry

39. In the Vienna Declaration, the strategy to promote the peaceful uses of outer space for the benefit and in the interest of all States includes the involvement of civil society, including industry. The Vienna Declaration also called for action to encourage the increased use of space-related systems and services by the private sector around the world. The plan of action of the Office for Outer Space Affairs reflects the increased efforts of the Office to encourage space-related non-governmental organizations and industry to contribute to the work of the Committee on the Peaceful Uses of Outer Space and its subsidiary bodies and to the activities of the United Nations Programme on Space Applications.

40. In accordance with General Assembly resolution 54/68, the Office for Outer Space Affairs organized during the thirty-seventh session of the Scientific and Technical Subcommittee of the Committee, in 2000, a symposium to strengthen the partnership of the Subcommittee with industry. The theme of the symposium was "Interactive multimedia satellite services: implications for the twenty-first century". Following the recommendations of the Subcommittee on the structure of the symposium and selection of a theme and speakers, the Office organized the second symposium during the thirty-eighth session of the Subcommittee with the theme "Emerging applications of global navigation satellite systems: a new utility with global benefits". The Office plans to organize similar symposia during the annual sessions of the Subcommittee. As recommended by the Subcommittee, the next symposium, to be held during its thirty-ninth session, in 2002, would focus on the promising area of very high resolution remote sensing and its impact on operational applications and discuss the new space market situation.

41. The participation of non-governmental organizations and industry is encouraged through the action teams being established by Member States to implement the recommendations of UNISPACE III. At its forty-fourth session, the Committee agreed that for each recommendation the action team should actively consider non-governmental entities that could be invited to participate in the teams. The results of the survey conducted among the non-governmental organizations with observer status with the Committee will indicate which organization is interested in joining which action team and will be circulated to Member States.

42. There are currently 13 intergovernmental and non-governmental organizations with observer status with the Committee on the Peaceful Uses of Outer Space.[11] At its forty-fourth session, the Committee decided to grant permanent observer status to the following three additional international, non-governmental organizations: European Association for the International Space Year, Space Generation Advisory Council and National Space Society. In accordance with its plan of action, the Office for Outer Space Affairs will continue to work closely with all those non-governmental organizations, in particular in implementing recommendations of UNISPACE III.

43. The Office for Outer Space Affairs has continued to encourage the participation of non-governmental organizations and industry in the activities of the United Nations Programme on Space Applications. As reflected in the report by the Expert on Space Applications to the Scientific and Technical Subcommittee,[12] the activities of the Programme benefited from the contributions of various space-related non-governmental organizations that have provided their expertise to the discussions in the workshops. Discussions are also under way with interested entities in the private sector to jointly organize workshops in 2002 for the benefit of developing countries.

## E. Initiating a public outreach programme, in particular for young people

44. A public outreach programme is another new area of activities of the Office for Outer Space Affairs as indicated in its plan of action. The Office has increased its efforts to provide more opportunities for young people to learn about space science and technology and their benefits for society.

45. The Office for Outer Space Affairs has begun to organize a series of symposia on enhancing the participation of youth in space activities in cooperation with Austria and ESA (see paras. 16 and 29 (f)). In addition, the Office contributes to increasing the public awareness of space benefits for society through its assistance in the organization and coordination of activities associated with the celebration of World Space Week.

46. In its resolution 54/68, the General Assembly declared 4 to 10 October World Space Week to celebrate each year at the international level the contributions of space science and technology to the betterment of the human condition. Following that resolution, the Office for Outer Space Affairs organized special events at Headquarters and in Vienna to launch the first World Space Week on 4 October 2000. Those events were organized for the public and were made possible by voluntary contributions by interested Member States, space agencies and non-governmental organizations and the private sector. The Office continues to encourage Member States to organize activities for the public, in particular for young people, during World Space Week.

47. In partnership with Space Media, Inc., the Office for Outer Space Affairs launched the UN-STARS Programme, which provides opportunities for students to participate in experiments conducted in outer space and to interact with students from around the world on issues relating to experiments and scientific and cultural exchange. In response to the invitation circulated to Member States, close to 50 schools from more than 30 countries have expressed their interest in the UN-STARS Programme. The Office is exploring possibilities with Space Media, Inc., to support the participation of those schools.

48. The Office for Outer Space Affairs supported the initiative taken by a group of young professionals to bring space science to school children in southern Africa. On the occasion of the total solar eclipse on 21 June 2001, some members of the Space Generation Advisory Council visited schools to give lectures on space science and to promote a secondary school curriculum on the subject.

49. As part of its public outreach programme, the Office for Outer Space Affairs refurbished its permanent space exhibition at the Vienna International Centre. Featuring models of spacecraft and rockets as well as interactive computer programmes, the exhibition has attracted the attention of visitors to the Vienna International Centre, in particular school children.

### F. Strengthening publication and information services

50. The Office for Outer Space Affairs improved its International Space Information Service by restructuring its home page, which now contains the texts of General Assembly resolutions and various documents prepared by the Office in the field of outer space activities in all the official languages. The Office also made available on-line the index of objects launched into outer space. This on-line index enables all users to have quick access to the information furnished in accordance with the Convention on the Registration of Objects Launched into Outer Space (resolution 3235 (XXIX), annex).

51. The Office is also integrating the International Aerospace Information Network into the International Space Information Service. The International Aerospace Information Network facilitates access to and use of global aerospace and related information made available by cooperating nations and provides a catalogue to aerospace information sources from which information searches can be launched.

## IV. Further enhancement of inter-agency coordination and cooperation

52. In its resolution 54/68, the General Assembly requested all relevant organizations of the United Nations to review and, where necessary, adjust their programmes and activities in line with the recommendations of UNISPACE III and to take appropriate measures to ensure their full and effective implementation, taking into account the needs of developing countries, in particular by further enhancing the coordination of their space-related activities through the Inter-Agency Meeting on Outer Space Activities. In its resolution 55/122, the Assembly urged organs, organizations and programmes of the United Nations system to take the action necessary for the effective implementation of the recommendations of UNISPACE III.

### A. Action taken by the Inter-Agency Meeting on Outer Space Activities

53. The space-related activities of the organizations within the United Nations system are coordinated at the annual session of the Inter-Agency Meeting on Outer Space Activities. Several United Nations entities and specialized agencies, in particular the Economic Commission for Africa, the Economic and Social Commission for Asia and the Pacific, the United Nations Environment Programme, the Food and Agriculture Organization of the United Nations, the United Nations Educational, Scientific and Cultural Organization, the International Telecommunication Union and the World Meteorological Organization, have extensive space-related programmes. Details of those programmes can be found in the annual reports of the Secretary-General on the coordination of outer space activities within the United Nations system, which are reviewed by the Inter-Agency Meeting.

54. The latest report[13] contains an overview of the programme of work for 2001, 2002 and future years. Following the agreement reached at the Inter-Agency Meeting in 2000, the report has been restructured to better reflect priority areas of space applications being identified by Member States. The new structure of the report follows closely the structure of the Vienna Declaration and allows the reader to identify easily which organizations contribute to implementing which actions recommended in the Vienna Declaration.

55. At its twenty-first session, held in Vienna in January 2001, the Inter-Agency Meeting began to consider a new agenda item, entitled "Methods to enhance further the inter-agency coordination of space activities". A similar item was also considered by the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space at its thirty-eighth session. The Inter-Agency Meeting welcomed the new agenda item of the Subcommittee, entitled "Means of and mechanisms for strengthening inter-agency cooperation and increasing the use of space applications and services within and among entities of the United Nations system". The Inter-Agency

Meeting agreed that the themes to be considered under the work plan[5] of the Subcommittee related to themes of importance to the Meeting. As an inter-agency contribution to the work of the Subcommittee, the Inter-Agency Meeting agreed that the Office for Outer Space Affairs should make a presentation to the Subcommittee to highlight examples of existing inter-agency collaboration in space-related areas (see para. 59 below).

56. The Inter-Agency Meeting also agreed that the Office for Outer Space Affairs should take a more active role in bringing to the attention of other intergovernmental bodies of the United Nations system the benefits of space applications and space-related activities being carried out by entities of the system. In that regard, the Meeting agreed that the Office should prepare a summary of the report of the Secretary-General on the coordination of outer space activities within the United Nations system[13] that would provide highlights of inter-agency collaboration. In response to that request, the Office plans to disseminate a summary of the Secretary-General's report widely to policy makers and the general public as a special publication. The Meeting also encouraged organizations involved in outer space activities that were to participate in the World Summit on Sustainable Development, to be held in Johannesburg, South Africa, in 2002, to actively promote at the Summit the use of space technology for sustainable development. In view of the above, the Office was requested to prepare information material in time for the Summit targeting decision makers and the general public, using the information contained in the Secretary-General's report.

57. The Inter-Agency Meeting stressed that the heads of organizations of the United Nations system should be made more aware of the work of the Inter-Agency Meeting on Outer Space Activities. In that connection, it was agreed that organizations participating in the Meeting should collectively formulate a message to the heads of organizations of the United Nations system and to policy makers in order to highlight the usefulness and cost-effectiveness of space applications. The message might indicate how space applications could contribute to the implementation of some of the major recommendations made recently in the United Nations system, such as those in the report of the Secretary-General entitled "We the peoples: the role of the United Nations in the twenty-first century" (A/54/2000) and the report of the Panel on United Nations Peace Operations (see A/55/305-S/2000/809).

## B. Action taken by the Committee on the Peaceful Uses of Outer Space and its Scientific and Technical Subcommittee to strengthen inter-agency cooperation

58. At its thirty-eighth session, the Scientific and Technical Subcommittee began to consider a new agenda item, entitled "Means of and mechanisms for strengthening inter-agency cooperation and increasing the use of space applications and services within and among entities of the United Nations system" under the three-year work plan.[5] Prior to the thirty-eighth session of the Subcommittee, a questionnaire had been circulated among the organizations of the United Nations system to identify the level of the use of space science and technology, potential areas for the use of space technology and space-related areas that required further inter-agency cooperation. In its resolution 55/122, the General Assembly encouraged all the organs, organizations and programmes of the United Nations system to contribute to the work of the Subcommittee by, inter alia, providing it with information in response to the questionnaire.

59. In accordance with the work plan, the Subcommittee, at its thirty-eighth session, analysed the current levels of usage of space applications and services within the United Nations system on the basis of information provided by organizations of the system. At that session, the Office for Outer Space Affairs organized a forum on space-related activities of organizations of the United Nations system. During the forum, together with several other entities of the United Nations system, the Office made a presentation highlighting existing inter-agency collaboration in space-related areas, as requested by the Inter-Agency Meeting on Outer Space Activities at its twenty-first session.

60. The Subcommittee noted that the information received in response to the questionnaire indicated that many organizations of the United Nations system were unaware of how space-based services might help them to meet their objectives. The Subcommittee was of the view that it was necessary to approach organizations of the system more actively to persuade them of the potential advantages of those services. For its work to

be conducted during the second year of the work plan, in 2002, the Subcommittee invited the Inter-Agency Meeting on Outer Space Activities to consider the barriers to the use of space technology. The Subcommittee also invited the Inter-Agency Meeting to consider how the Subcommittee could support the work of the Inter-Agency Meeting and the space-related activities of organizations of the United Nations system.

## V. Conclusion

61. During the past year, significant progress was made in establishing a mechanism and building a solid basis for implementing the recommendations of UNISPACE III. The Committee on the Peaceful Uses of Outer Space and its subsidiary bodies continue to play a leading role in turning into reality the strategy outlined in the Vienna Declaration to address global challenges with the use of space tools. The work conducted by those bodies through their consideration of agenda items at their annual sessions is being complemented by the activities being carried out by the Committee's action teams, under the voluntary leadership of Member States, to implement recommendations of UNISPACE III during the inter-sessional period.

62. The Office for Outer Space Affairs continues to support the work of the Committee and its subsidiary bodies through its secretariat services and the activities of the United Nations Programme on Space Applications. By implementing its plan of action, the Office would also contribute to the activities of the action teams of the Committee.

63. In strengthening and repositioning space activities in the United Nations system, the Committee on the Peaceful Uses of Outer Space, the Office for Outer Space Affairs and the Inter-Agency Meeting on Outer Space Activities work together towards the same goal, to bring the benefits of space technology and its applications to the attention of the heads of organizations and other intergovernmental bodies of the United Nations system.

64. There has been increasing synergy among the efforts being made by the Committee on the Peaceful Uses of Outer Space and its subsidiary bodies, the Office for Outer Space Affairs and the Inter-Agency Meeting on Outer Space Activities towards the goals identified by UNISPACE III. Their efforts, if supported by all Governments, all organizations of the United Nations system and as many non-governmental organizations and industries as possible, will lead to turning the possibilities envisaged in the Vienna Declaration into reality. By the year 2004, when the General Assembly reviews the outcome of UNISPACE III, the expanded use of space science and technology should have led to visible improvement in the human condition, particularly in the developing parts of the world, and to global recognition of the usefulness of space tools to enhance human development and security.

*Notes*

[1] United Nations publication, Sales No. E.00.I.3.

[2] Ibid., chap. I., resolution 1.

[3] A/AC.105/761, annex II.

[4] See *Official Records of the General Assembly, Fifty-fourth Session, Supplement No. 20* and corrigendum (A/54/20 and Corr. 1), annex I.

[5] A/AC.105/736, annex II, paras. 40 and 41.

[6] A/AC.105/761, para. 130.

[7] *Official Records of the General Assembly, Fifty-fifth Session, Supplement No. 20* (A/55/20), para. 87.

[8] Ibid., paras. 71 and 72.

[9] *Official Records of the General Assembly, Fifty-fifth Session, Supplement No. 6* (A/55/6/Rev.1), Prog. 4.

[10] A/AC.105/749.

[11] Currently, the following organizations have permanent observer status with the Committee on the Peaceful Uses of Outer Space: Association of Space Explorers, Committee on Space Research, European Space Agency, International Academy of Astronautics, International Astronautical Federation, International Astronomical Union, International Law Association, International Mobile Satellite Organization, International Organization of Space Communications, International Society for Photogrammetry and Remote Sensing, International Space University, International Telecommunications Satellite Organization and the Planetary Society.

[12] A/AC.105/750.

[13] A/AC.105/757.